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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,460	08/31/2001	Daniel Lee Reneau	PU010185	2856
7590 05/07/2004			EXAMINER	
JOSEPH S. TRIPOLI THOMSON MULTIMEDIA LICENSING INC. 2 INDEPENDENCE WAY P.O. BOX 5312 PRINCETON, NJ 08543-5312			TRAN, TRANG U	
			ART UNIT	PAPER NUMBER
			2614	
			DATE MAILED: 05/07/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/944,460

Applicant(s) *ml*

RENEAU ET AL.

Examiner

Trang U. Tran

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4.5</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 8 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitation: "a component video format output in communication with said video processor and said format converter and operative to selectively output one of the received component video signal and the converted video signal" which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification only discloses a switch for selectively output one of the processed video signal (not received component video signal) and the converted video signal.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Bannister et al. (US Patent No. 4,743,958).

In considering claim 1, Bannister et al discloses all the claimed subject matter, note 1) the claimed in a video signal receiver having a component video signal input, a method of processing an input video signal comprising the steps of: receiving a video signal via the component video signal input, the received video signal having a video format that is one of multiple video formats is met by the crosspoint switching network 10 which is controlled by a crosspoint controller 12 for selecting particular input to be transmitted on the output lines 14a, 14b and 14c (Fig. 1, col. 2, lines 10-28), 2) the claimed converting the video format of the received video signal to a particular video format if the video format of the received video signal is different than the particular video format is met by the RGB to YUV transcoder 21 (Fig. 2, col. 2, lines 18-32), and 3) the claimed providing one of the converted video signal and the received video signal as an output is met by the multiplexers 22a, 22b, 22c which output the converted YUV signals from the RGB to YUV transcoder 21 or the selected YUV according to the CTL2 command (Fig. 2, col. 2, lines 28-38).

In considering claim 3, the claimed wherein the step of receiving a video signal via the component video signal input, the received video signal, having a video format that is one of multiple video formats includes receiving a video signal having a video format that is one of an RGB and YUV video format is met by the RGB component video is input over the three input lines 18a, 18b, 18c at a second source input and YUV

component video is input at a third source input over the three input lines 19a, 19b and 19c (Fig. 1, col. 2, lines 10-28).

In considering claim 4, the claimed wherein the step of converting the video format of the received video signal to a particular video format if the video format of the received video signal is different than the particular video format comprises converting the video format of the received video signal to a YUV video format if the received video signal is different than the YUV video format is met by the RGB to YUV transcoder 21 (Fig. 2, col. 2, lines 18-32).

In considering claim 5, the claimed further comprising the step of: selecting one of the converted video signal and the received video signal as an output of the video signal receiver is met by the multiplexers 22a, 22b, 22c which output the converted YUV signals from the RGB to YUV transcoder 21 or the selected YUV according to the CTL2 command (Fig. 2, col. 2, lines 28-38), and the claimed the step of providing one of the converted video signal and the received video signal as an output of the video signal receiver includes providing the selected one of the converted video signal and the received video signal as an output of the video signal receiver is met by the output video signal from the multiplexers 22a, 22b and 22c (Fig. 2, col. 2, line 28 to col. 3, line 55).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bannister et al. (US Patent No. 4,743,958) in view of Jaspers et al. (US Patent No. 6,697,110 B1).

In considering claim 6, Bannister et al disclose all the limitations of the instant invention as discussed in claim 1 above, except for providing the claimed wherein the step of converting the video format of the received video signal to a particular video format if the video format of the received video signal is different than the particular video format includes the step of utilizing a video format matrix converter. Jaspers et al teach that in the embodiment of Fig. 9A, the matrix circuit MX comprises a conventional RGB-to-YUV matrix circuit which converts the output signal g of the color matrix B and the output signals R'' and B'' of the white balance control circuit WBC into a luminance signal and the chrominance signals V and U (Fig. 9A, col. 11, lines 8-19). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the RGB-to-YUV matrix converter circuit as taught by Jaspers et al into Bannister et al's system since it merely amounts to selecting readily available RGB-to-YUV matrix converter.

In considering claim 7, the claimed wherein the step of utilizing a video format video converter includes the step of utilizing a video format matrix converter that is operative to convert an RGB video format signal into a YUV video format converter is met by the matrix circuit MX comprises a conventional RGB-to-YUV matrix circuit which converts the output signal g of the color matrix B and the output signals R'' and B'' of

the white balance control circuit WBC into a luminance signal and the chrominance signals V and U (Fig. 9A, col. 11, lines 8-19) of Jaspers et al.

7. Claims 2, 8-9 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bannister et al. (US Patent No. 4,743,958) in view of Yamaguchi et al. (US Patent No. 6,577,349 B1).

In considering claim 2, Bannister et al disclose all the limitations of the instant invention as discussed in claim 1 above, except for providing the claimed further comprising the step of: determining the video format of the received video signal before the step of converting the video format of the received video signal.

Yamaguchi et al teach that the decoder 101 decodes broadcast signals encoded by MPEG2, for example, and outputs the i video signal or p video signal in response to the format of the video signal in the received broadcast signal, at the same time, the decoder 101 outputs i/p identifying information which informs the switching circuits 6 and 7 whether the format of the received video signal is the i video signal or p video signal to control each switching circuit to output its respective signal type (Fig. 10, col. 8, lines 24-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the decoder as taught by Yamaguchi et al into Bannister et al's system in order to capable of receiving mixed video broadcast signals having a plurality of different formats and automatically identifying the formatting of the received signals without user selection so that the user may be able to connect a television set compatible with either the interlace scanning system or the progressive

scanning system, to a corresponding output terminal for interlace scanning video signals or an output terminal for progressive scanning video signals provided on the receiver (col. 2, lines 62-67 of Yamaguchi et al).

In considering claim 8, Bannister et al. discloses all the claimed subject matter, note 1) the claimed a video signal receiver comprising: a component video format input operative to receive a component video signal in one of various video formats is met by the crosspoint switching network 10 which is controlled by a crosspoint controller 12 for selecting particular input to be transmitted on the output lines 14a, 14b and 14c (Fig. 1, col. 2, lines 10-28).

However Bannister et al explicitly does not disclose: 1) the claimed a video processor in communication with said component video format input and operative to provide video processing of the received component video signal; 2) the claimed a format converter in communication with said video processor and operative to convert the video format of the received video signal to a predetermined video format if the video format the received video signal is different than the predetermined video format; and 3) the claimed a component video format output in communication with said video processor and said format converter and operative to selectively output one of the received component video signal and the converted video signal.

Yamaguchi et al teach that: 1) the decoder 101 decodes broadcast signals encoded by MPEG2, for example, and outputs the i video signal or p video signal in response to the format of the video signal in the received broadcast signal, at the same time, the decoder 101 outputs i/p identifying information which informs the switching

circuits 6 and 7 whether the format of the received video signal is the i video signal or p video signal to control each switching circuit to output its respective signal type, the video signal decoded by the decoder 101 is supplied to the i-p scan converter 4, p-i scan converter 5, switching circuit 6 and switching circuit 7, 2) the i-p scan converter 4 is scan converted from i to p and is input to the switching circuit 7, and 3) the switching circuit 7 selected either received p video signal or converted signal from i-p scan converter (Figs. 10 and 11, col. 8, line 24 to col. 9, line 39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the decoder, the converter and the switching circuit as taught by Yamaguchi et al into Bannister et al's system in order to capable of receiving mixed video broadcast signals having a plurality of different formats, converting received video signals into video signals having a format different from that of the received signals, and outputting both the converted signals and the received video signals (col. 2, lines 40-45 of Yamaguchi et al), so that the user may be able to connect a television set compatible with either the interlace scanning system or the progressive scanning system, to a corresponding output terminal for interlace scanning video signals or an output terminal for progressive scanning video signals provided on the receiver (col. 2, lines 62-67 of Yamaguchi et al).

In considering claim 9, the claimed wherein said various video formats include an RGB video format and a YUV video format is met by the RGB component video is input over the three input lines 18a, 18b, 18c at a second source input and YUV component

video is input at a third source input over the three input lines 19a, 19b and 19c (Fig. 1, col. 2, lines 10-28) of Bannister et al.

In considering claim 11, the claimed wherein said component video format output comprises a switch is met by the switch 6 or the switching circuit 7 which selected either received video signal or converted signal from scan converter (Figs. 10 and 11, col. 8, line 24 to col. 9, line 39) of Yamaguchi et al.

In considering claim 12, the claimed further comprising a processor in communication with said switch, said processor operative to provide switch control signals to said switch, and said switch is operative to utilize the switch control signals to select and thus selectively output one of the received component video signal and the converted video signal is met by the decoder 101 decodes broadcast signals encoded by MPEG2, for example, and outputs the i video signal or p video signal in response to the format of the video signal in the received broadcast signal, at the same time, the decoder 101 outputs i/p identifying information which informs the switching circuits 6 and 7 whether the format of the received video signal is the i video signal or p video signal to control each switching circuit to output its respective signal type (Fig. 10, col. 8, lines 24-43) of Yamaguchi et al.

In considering claim 13, the claimed wherein said video processor is further operative to determine if the video format of the received video signal is the same as the predetermined video format is met by the decoder 101 outputs i/p identifying information which informs the switching circuits 6 and 7 whether the format of the received video

signal is the i video signal or p video signal to control each switching circuit to output its respective signal type (Fig. 10, col. 8, lines 24-43) of Yamaguchi et al.

In considering claim 14, the claimed wherein the video processor is further operative to provide a control signal to said processor to provide the control signal to said switch is met by the decoder 101 outputs i/p identifying information which informs the switching circuits 6 and 7 whether the format of the received video signal is the i video signal or p video signal to control each switching circuit to output its respective signal type (Fig. 10, col. 8, lines 24-43) of Yamaguchi et al.

Claim 15 is rejected for the same reason as discussed in claim 8.

In considering claim 16, 1) the claimed further comprising: means for determining the video format of the received video signal is met by the decoder 101 outputs i/p identifying information which informs the switching circuits 6 and 7 whether the format of the received video signal is the i video signal or p video signal to control each switching circuit to output its respective signal type (Fig. 10, col. 8, lines 24-43) of Yamaguchi et al, and 2) the claimed means operative in response to said means for determining the video format of the received video signal to enable conversion of the video format of the received video signal is met by the i-p scan converter 4 which is scan converted from i to p and is input to the switching circuit 7 or the p-i scan converter 5 which is scan converted from p to i and is input to the switching circuit 6 (Figs. 10 and 11, col. 8, line 24 to col. 9, line 39) of Yamaguchi et al.

In considering claim 17, the claimed wherein the predetermined video format is YUV is met by the standard YUV output (col. 3, lines 51-55) of Bannister et al.

In considering claim 18, the claimed wherein the multiple video formats includes RGB and YUV is met by the RGB to YUV transcoder 21 (Fig. 2, col. 2, lines 18-32) of Bannister et al.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bannister et al. (US Patent No. 4,743,958) in view of Yamaguchi et al. (US Patent No. 6,577,349 B1), as applied to claims 8-9 above, and further in view of Jaspers et al. (US Patent No. 6,697,110 B1).

In considering claim 10, the combination of Bannister et al and Yamaguchi et al disclose all the limitations of the instant invention as discussed in claims 8-9 above, except for providing the claimed wherein the predetermined video format is YUV and said format converter comprises an RGB to YUV video format matrix converter. Jaspers et al teach that in the embodiment of Fig. 9A, the matrix circuit MX comprises a conventional RGB-to-YUV matrix circuit which converts the output signal g of the color matrix B and the output signals R'' and B'' of the white balance control circuit WBC into a luminance signal and the chrominance signals V and U (Fig. 9A, col. 11, lines 8-19). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the RGB-to-YUV matrix converter circuit as taught by Jaspers et al into the combination of Bannister et al and Yamaguchi et al's system in since it merely amounts to selecting readily available RGB-to-YUV matrix converter.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Worrell (US Patent No. 6,690,425 B1) discloses aspect ratio control arrangement in a video display.

Han (US Patent No. 6,229,574 B1) discloses screen ratio converter for digital TV.

Sinclair et al. (US Patent No. 6,177,946 B1) disclose method and apparatus for processing video data and graphics data by a graphic controller.

Taira et al. (US Patent No. 6,104,437) disclose display signal processing device having a controllable LED display.

Gove et al. (US Patent No. 5,796,442) disclose multi-format television receiver.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (703) 305-0090. The examiner can normally be reached on 8:00 AM - 5:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT
April 29, 2004


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PATENT EXAMINER